

To study efficacy and safety of intravenous palonosetron against ondansetron in post surgical patients undergoing General Anaesthesia”

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Abstract:

Background: Post operative nausea vomiting (PONV) is an alarming surgical complication¹ with critical clinical consequences leading to delayed recovery in patients undergoing general anaesthesia. In general population, incidence of PONV is very high (i.e.30-40%) and which increases further in high risk individuals⁷. Ondansetron, a 5HT₃ receptor antagonist is used in PONV due to its better safety profile in comparison to other anti-emetics. Palonosetron, a second generation 5 HT₃ receptor antagonist with unique action and longer half life can be better alternative in treatment of PONV. As minimal data is available on efficacy of palonosetron, study was undertaken to compare its safety and efficacy with ondansetron in all adult patients planned for surgical procedures under general anaesthesia.

Objectives: To assess the efficacy and safety of IV Palonosetron compared to IV ondansetron in relation to adverse effects in post surgical patients undergoing GA.

Methods: In a double blinded randomized controlled study, about 116 patients were enrolled and divided into two equal groups. Patients were received either palonosetron or ondansetron before induction of anaesthesia and its efficacy was assessed by complete response, severity of nausea,^{80, 98} use of rescue medication, and overall satisfaction score by 5 point Likert scale within 48 hrs of surgery⁹⁸. Mean, standard deviations and proportions were calculated among the groups. Statistical analysis was done by **Chi-square test** and **Student t-test**. (p< 0.05 was considered significant)

Results: P value for CR, use of rescue medications, nausea severity and overall satisfaction was statistically significant in palonosetron group.

Conclusion: The present study showed that Palonosetron was more efficacious than ondansetron in controlling PONV and as safe as ondansetron .

Key words: Post operative nausea vomiting (PONV), complete response (CR).